Joint

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR RELIABLE MULTICAST DISTRIBUTION

the sp	ecification of which	(check one)								
[X]	is attached hereto).								
[]	was filed on as United States Application Serial No.: and was amended on (if applicable).									
specifi	I hereby state tha cation, including the	t I have reviewed e claims, as ame	d and understand the contents of inded by any amendment referred	the at I to ab	ove-io	lenti	ified			
patent	I acknowledge the ability as defined in	e duty to disclose 37 C.F.R. §1.56	e information which is known by m	ne to b	e mat	eria	l to			
identifi	ation(s) for patent o ated at least one co ed below, by check	r inventor's certifi ountry other than ing the box, anv	efits under 35 U.S.C. 119(a)-(d) o ficate or 365(a) of any PCT interna the United States of America, lis foreign application for patent or ir g date before that of the applicati	ationa ted be ovento	l applic low ar or's cei	cation nd h tific	on wi ave a ate. o	nich also or of	any imed:	
	,	<u>Pri</u>	ior Foreign Application(s)	N	ority lot imed	C YI	Cert Copy ES	Filed	d? IO	
(Numb	er)	(Country)	(Day/Month/Year filed)] .]	[]	[]	
(Numb	er)	(Country)	(Day/Month/Year filed)	. []	[]]]	
(Numb	er)	(Country)	(Day/Month/Year filed)	_ []	[]	[]	
I hereb below.	y claim the benefit	under 35 U.S.C.	§119(e) of any United States pro	vision	al app	licat	ion(s	s) list	ed	
(Applic	ation Number)		(Filing Date)							
(Applic	ation Number)		(Filing Date)	<u>.</u>						

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Barry W. Chapin, Esq.	Reg. No. 39,934
David E. Huang, Esq.	Reg. No. 39,229
Jeffrey J. Duquette, Esq.	Reg. No. 45,487
Christopher J. Lutz, Esq.	Reg. No. 44,883
Paul P. Kriz, Esq.	Reg. No. 45,752
Paul E. Lewkowicz, Esq.	Reg. No. 45,870

of Chapin & Huang, L.L.C., Westborough Office Park, 1700 West Park Drive, Westborough, Massachusetts.

I also hereby grant additional Powers of Attorney to all of the above-identified attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

Please send correspor	ndence to: <u>Barry W. Chapir</u>	n, Esq.	
Chapin & Huang, L.L.C	C., Westborough Office Park, 1700	West Park Drive, Westbor	rough, MA 01581
Direct telephone calls	o: Barry W. Chapin, Esq.	Telephone No.: 5	08-366-9600
Direct facsimiles to: _	Barry W. Chapin, Esq.	Facsimile No.: 5	08-616-9805
statements made on in made with the knowled imprisonment, or both,	re that all statements made herein formation and belief are believed t lge that willful false statements and under Section 1001 of Title 18 of the dize the validity of the application of the statements.	o be true; and further that I the like so made are pun he United States Code an	these statements were ishable by fine or d that such willful false
Full name of sole			
or first inventor	Zheng Yang		
Inventor's Signature		Date	<u></u>
Residence	3909 Stevenson Blvd. Apt. # 703		
Citizenship	Peoples Republic of China		
Post Office Address	Same as above		

	
	•
Full name of second jo	oint
inventor, if any	
Inventor's Signature_	Date 2/13/04
Residence	1322 Nelson Way, Sunnyvate, California 94087
Citizenship	Peoples Republic of China
Post Office Address _	Same as above
	0-27-
A A A A A A A A A A A A A A A A A A A	
Full name of third joint	1
inventor, if any	
Inventor's Signature_	Shanchi Zhan Date 2/13/2000
Residence	660 Boise Ct., Sunnyvale, California 94087
Citizenship	United States of America
Post Office Address _	Same as above
Full name of fourth join	nt ;
inventor, if any	Kenneth Mueller II
Inventor's Signature_	
Residence	1120 Alameda Padre Serra, Santa Barbara, California 93103
	United States of America
Post Office Address	Same as above
_	

Full name of second join	nt	
inventor, if any	Dan Li	
Inventor's Signature		Date
Residence	1322 Nelson Way, Sunnyvale, California 94087	
Citizenship	Peoples Republic of China	
Post Office Address	Same as above	
Full name of third joint		
inventor, if any		
Inventor's Signature		Date
Residence	660 Boise Ct., Sunnyvale, California 94087	
Citizenship	United States of America	
Post Office Address	Same as above	
Full name of fourth joint		
inventor, if any		
Inventor's Signature	Killula	Date 2/17/1004
Residence	to ac	
	United States of America	101111a 33103
•		
Post Office Address	Jame do anove	

Joint

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR RELIABLE MULTICAST DISTRIBUTION

the specification of which (check one) [X] is attached hereto. as United States Application Serial No.: was filed on (if applicable). and was amended on I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above. I acknowledge the duty to disclose information which is known by me to be material to patentability as defined in 37 C.F.R. §1.56. I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed: Prior Foreign Application(s) Priority Certified Not Copy Filed? Claimed NO] (Number) (Country) (Day/Month/Year filed) (Day/Month/Year filed) (Number) (Country) (Number) (Country) (Day/Month/Year filed) I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s) listed below. (Application Number) (Filing Date) (Application Number) (Filing Date)

Joint

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

(Application Number)

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

	METHOD AND A	APPARATUS F	OR F	RELIABLE MULTICAST DI	STR	BU	TION			۱ -	_
the spe	ecification of which	(check one)								(()) <i>[</i>
[X]	is attached hereto	is attached hereto.									
[]	was filed on and was amende	d on	as Ur	nited States Application Ser (if applicable).	ial N	o.: _.					
specific	I hereby state tha cation, including the	it i have reviewe e claims, as am	ed an ende	d understand the contents of by any amendment referr	of the	e ab	oove-id	dent	ified		
patenta	I acknowledge the bility as defined in	e duty to disclos 37 C.F.R. §1.50	e inf 6.	ormation which is known by	/ me	to t	e mat	eria	l to		
luentine	tion(s) for patent o ated at least one co ed below, by check	r inventors certi ountry other thai ing the box, any	ricate n the / fore	under 35 U.S.C. 119(a)-(d) e or 365(a) of any PCT inter United States of America, I ign application for patent or te before that of the applica	rnatio listed	ona I be	l appli low ar	cation of the state of the stat	on whave a	ich Ilso Ir of	any imed:
		<u>P</u> 1	rior F	oreign Application(s)		Ν	ority ot imed	C YI	Certi copy i	Filed	
(Numbe	er)	(Country)		(Day/Month/Year filed)		[]	Į]	[]
(Numbe	er)	(Country)		(Day/Month/Year filed)		(]	[.]	[]
(Numbe	r)	(Country)		(Day/Month/Year filed)		[]	[]	[]
l hereby below.	claim the benefit (under 35 U.S.C.	§11	9(e) of any United States p	rovis	iona	al appl	icati	on(s)) list	ed
(Applica	tion Number)			(Filing Date)							

(Filing Date)

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Barry W. Chapin, Esq.	Reg. No. 39,934
David E. Huang, Esq.	Reg. No. 39,229
Jeffrey J. Duquette, Esq.	Reg. No. 45,487
Christopher J. Lutz, Esq.	Reg. No. 44,883
Paul P. Kriz, Esq.	Reg. No. 45,752
Paul E. Lewkowicz, Esq.	Reg. No. 45,870

of Chapin & Huang, L.L.C., Westborough Office Park, 1700 West Park Drive, Westborough, Massachusetts.

I also hereby grant additional Powers of Attorney to all of the above-identified attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

Please send correspon	dence to: Barry W. Cl	napin, Esq.	
Chapin & Huang, L.L.C	., Westborough Office Park, 1	700 West Park Drive, Westl	borough, MA 01581
Direct telephone calls t	o: Barry W. Chapin, Es	sq. Telephone No.	: 508-366-9600
Direct facsimiles to:	Barry W. Chapin, Esq.	Facsimile No.:	508-616-9805
statements made on in made with the knowled imprisonment, or both,	e that all statements made he formation and belief are believ ge that willful false statements under Section 1001 of Title 18 dize the validity of the applicat	ved to be true; and further the s and the like so made are p s of the United States Code;	at these statements were unishable by fine or and that such willful false
Full name of sole or first inventorInventor's Signature	Zheng Yang My Y	Date	2/13/2004
Residence	3909 Stevenson Blvd. Apt. #	703, Fremont, California 94	538
Citizenship	Peoples Republic of China		
Post Office Address	Same as above		

Full manner of a second !		
Full name of second j		
inventor, if any		
Inventor's Signature_	Date 2/13/04	
Residence	1322 Nelson Way, Sunnyvate, California 94087	
Citizenship	Peoples Republic of China	
Post Office Address _	Same as above	1
- Was	ali AFF	
Full name of third joint	t	
inventor, if any	Shanchi Zhan	
Inventor's Signature_	followed 2/13/2004	
Residence	660 Boise Ct., Sunnyvale, California 94087	
Citizenship	United States of America	
Post Office Address _	Same as above	
		0
Full name of fourth joir	nt :	
inventor, if any	Kenneth Mueller II	
Inventor's Signature	Date	
Residence		
Citizenship		
Post Office Address		

Joint

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Declaration for Patent Application

As a named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name;

I believe I am the original, first and sole inventor (if only one name is listed) or an original, first and joint inventor (if plural names are listed in the signatory page(s) commencing at page 3 hereof) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR RELIABLE MULTICAST DISTRIBUTION

	METHOD AND A	APPARATUS FOI	R RELIABLE MULTICAST DISTR	RIBUTION			
the spe	cification of which	(check one)				$g_{\mathcal{O}}$	_
[X]	is attached heret	0.			<u> </u>		ME
[]	was filed on and was amende	ed on as	United States Application Serial N (if applicable).	No.:	·		¥
specific	I hereby state that ation, including the	at I have reviewed e claims, as amer	and understand the contents of the	ne above-io to above.	dentified		
patenta	I acknowledge th bility as defined in	e duty to disclose 37 C.F.R. §1.56.	information which is known by me	e to be mat	erial to	-	
designa identifie	tion(s) for patent o ated at least one c ad below, by check	r inventor's certific ountry other than king the box, anv f	fits under 35 U.S.C. 119(a)-(d) or cate or 365(a) of any PCT internat the United States of America, liste oreign application for patent or inv g date before that of the application	ional appliced below are rentor's cer	cation wind have this cate	hich also or of any	
		<u>Pric</u>	or Foreign Application(s)	Priority Not Claimed	Copy	tified Filed? NO	
(Numbe	er)	(Country)	(Day/Month/Year filed)	[]	[]	[]	
(Numbe	er)	(Country)	(Day/Month/Year filed)	[]	[]	[]	
(Numbe	r)	(Country)	(Day/Month/Year filed)	[]	[]	[]	
I hereby below.	claim the benefit	under 35 U.S.C. §	§119(e) of any United States provi	sional app	lication(s	s) listed	
(Applica	tion Number)	<u></u>	(Filing Date)				
(Applica	tion Number)	···	(Filing Date)	<u>,</u>			

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information known by me to be material to patentability as defined in 37 C.F.R. 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)
(Application Serial No.)	(Filing date)	(Status: patented, pending, abandoned)

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith:

Barry W. Chapin, Esq.	Reg. No. 39,934
David E. Huang, Esq.	Reg. No. 39,229
Jeffrey J. Duquette, Esq.	Reg. No. 45,487
Christopher J. Lutz, Esq.	Reg. No. 44,883
Paul P. Kriz, Esq.	Reg. No. 45,752
Paul E. Lewkowicz, Esq.	Reg. No. 45,870

of Chapin & Huang, L.L.C., Westborough Office Park, 1700 West Park Drive, Westborough, Massachusetts.

I also hereby grant additional Powers of Attorney to all of the above-identified attorney(s) and/or agent(s) to file and prosecute an international application under the Patent Cooperation Treaty based upon the above-identified application, including a power to meet all designated office requirements for designated states.

Please send correspondence to: Barry W. Chapin, Esq.					
Chapin & Huang, L.L.C., Westborough Office Park, 1700 West Park Drive, Westborough, MA 01581					
Direct telephone calls t	o: Barry W. Chapin, Esq.	Telephone No.	: 508-366-9600		
Direct facsimiles to: _	Barry W. Chapin, Esq.	Facsimile No.:	508-616-9805		
I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.					
Full name of sole					
or first inventor	Zheng Yang		· · · · · · · · · · · · · · · · · · ·		
Inventor's Signature		Date _			
Residence					
Citizenship	Peoples Republic of China		·		
Post Office Address	Same as above				

Full name of second jo	pint	
inventor, if any	Dan Li	
Inventor's Signature_		_ Date
Residence	1322 Nelson Way, Sunnyvale, California 94087	
Citizenship	Peoples Republic of China	· ·
Post Office Address _	Same as above	
Full name of third joint	· · · · · · · · · · · · · · · · · · ·	
	Shanchi Zhan	<u> </u>
		_ Date
Residence	660 Boise Ct., Sunnyvale, California 94087	
Citizenship	United States of America	
Post Office Address _	Same as above	
Full name of fourth joir	nt /	
inventor, if any	Kenneth Mueller II	
Inventor's Signature	allyner	Date <u>2/17/2004</u>
Residence	1120 Alameda Padre Serra, Santa Barbara, Cali	fornia 93103
Citizenship	United States of America	
Post Office Address	Same as above	